(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 15 April 2004 (15.04.2004)

PCT

(10) International Publication Number WO 2004/031793 A1

(51) International Patent Classification7: G01R 33/561

(21) International Application Number:

PCT/IB2003/004014

(22) International Filing Date:

12 September 2003 (12.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

02079089.5

1 October 2002 (01.10.2002) I

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

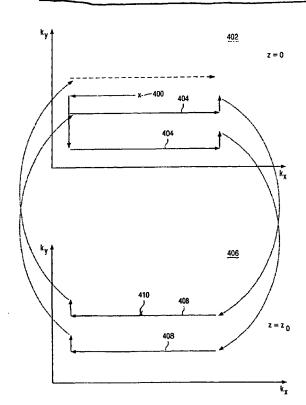
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): VAN DEN BRINK,

Johan, S. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Bindhoven (NL).

- (74) Agent: COHEN, Julius, S.; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (national): AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

[Continued on next page]

(54) Title: A METHOD FOR K-SPACE DATA ACQUISITION AND MRI DEVICE



(57) Abstract: The invention relates to a method for interleaved k-space data acquisition for magnetic resonance imaging (MRI), the k-spaces having a first coordinate axis and a second coordinate axis, the method comprising: a) sampling into a first direction along the first coordinate axis, b) applying a first compensation pulse, c) sampling into a second direction along the first coordinate axis, the second direction being opposite to the first direction, applying a second compensation pulse, d) repetitively carrying out the steps a) to d).

WO 2004/031793 A1